for CIOs and CSOs2

Anonymous Survey about Computer Access, Worker's Understanding and Compliance

The purpose of the study: To understand how workers perceive computer access rules and their motivations to engage in workarounds to gain access to computer systems or parts of systems to which they are not supposed to access. We are not talking about hackers, rather we ask about barriers or inconveniences confronting personnel who seek to do their assigned work but are sometimes denied access because of problems such as lost passwords, required password changes, forgetting a specific log-on name, altered rules, system breakdowns, need to access the system via a different computer than usually used, etc. It is not a study of those with malicious intent.

Your participation in this research study is voluntary. If you decide not to participate, you are free to stop at any time. Withdrawal will not interfere with your work or with your organization. If you have questions about your participation or rights in this research, you can discuss them with the study investigator or members of the study team. You may contact Prof. Ross Koppel, Ph.D. at the University of Pennsylvania at: rkoppel@sas.upenn.edu.

1. Which “industrial” sector best describes the principal business area of your organization? (Note that we do not ask for the name of your organization or any identifying information.) You may check more than one category.

- [ ] Agriculture, Forestry, Fishing and Hunting
- [ ] Mining, Quarrying, and Oil and Gas Extraction
- [ ] Utilities (electricity, water, waste treatment, etc.)
- [ ] Construction
- [ ] Manufacturing
- [ ] Wholesale Trade
- [ ] Retail Trade
- [ ] Transportation and Warehousing
- [ ] Information Technology
- [ ] Finance and Insurance
- [ ] Real Estate and Rental and Leasing
- [ ] Professional, Scientific, and Technical Consulting Services
- [ ] Management of Companies and Enterprises
- [ ] Administrative & Support & Waste Management & Remediation Services
- [ ] Educational Services
- [ ] Health Care and Social Assistance
- [ ] Arts, Entertainment, and Recreation

2. How would you define your role at your organization (may check more than one box, but indicate if that is your primary role):

	Yes, Primary	Yes, Secondary
I direct my organization's Information Technology services	○	○
I work on the help desk in the IT Dept. of my organization	○	○
I'm part of the IT team that addresses requests for modifications/fixes	○	○
I write or maintain software or hardware here	○	○
I train staff on IT subjects	○	○
I help set computer security policy for my organization	○	○
I work in an administrative role in the IT Dept (e.g., office manager).	○	○

Other (please specify)

3. Who sets policy about access to the computers and systems (e.g., desktops, network, laptops, servers) workers use most often in the course of their work? (Check as many as apply)

- ☐ No idea
- ☐ Individual workplace unit (e.g., my dept or my boss)
- ☐ Senior security or IT staff - Set at organization-wide level
- ☐ Regulatory rules (rules set by regulators)
- ☐ Professional or industry rules (e.g., all engineers will password protect…)

Other (please specify)

4. To the best of your knowledge, who sets your organization's policies on computer access?

- [ ] Don’t know
- [ ] Local administrators
- [ ] Rules are set by others, probably in more senior positions
- [ ] Other (please specify)

5. To the best of your knowledge, are your organization's policies on computer access based on: (Check as many as apply.)

- [ ] Don't know
- [ ] Systematic analysis of use patterns
- [ ] Probably rules applied from previous or another setting
- [ ] Logic of safe cyber security planning
- [ ] Other (please specify)

6. Do those who set security policy on access ask for input from users?

- ( ) Yes
- ( ) No
- ( ) Don't know

Comment

7. If "Yes" to above: To the best of your knowledge, was their input considered?

- ( ) Yes
- ( ) No
- ( ) Don't know

Comment

8. Many workers are frustrated by access policies that seem to provide little if any security benefit, and are also non-responsive to the needs of users who are trying to do their jobs. On a scale from 1 to 5, where 1 = “Not frustrated, policy appears to be reasonable” to 5 = “Very frustrated, policy seems arbitrary or not responsive to workflow needs,” please indicate your assessment of workers' views (may not be a correct reflection of the actual policy, but nevertheless, it's what most believe):

1 (Not Frustrated)	2	3	4	5 (Very Frustrated)
○	○	○	○	○

9. Even if you are frustrated by the access policy, do you see it as necessary to protect security, or do you see it as not well thought out, where the security benefit is less than the effort required to comply.

1 (Thoughtfully developed)	2	3	4	5 (More of a hindrance than anything else)
○	○	○	○	○

10. If people have a theory or belief about why the access rules may appear non-responsive to workflow needs, is it (can indicate multiple reasons):

	Very Likely	Likely	Un-likely	Don't know	NA. Rules responsive
Not an issue; most perceive security policy as reasonable and the motivations as reasonable	○	○	○	○	○
Perceived incompetence of those who are in charge of security	○	○	○	○	○
Perceived arrogance of those who are in charge of security ("I know what is best for you – don't question my authority…")	○	○	○	○	○
Externally-imposed regulations which do not appear to be reasonable, dictating access rules	○	○	○	○	○
Using security as an excuse for laziness, e.g., they should fix something but just say it must be as is because of "security"	○	○	○	○	○

Other (please specify)

11. In general, please indicate how these various access rules (see below) are perceived by MOST people in your organization. (If appropriate, for each access rule select one of the button options. Otherwise, please write an explanation in the "It's Complicated" box)

	Generally sensible	Some-times sensible	Not sensible	Don't know
Log-on rules	○	○	○	○
It's complicated, Please explain…				
Need to use different passwords for different applications	○	○	○	○

	Generally sensible	Some-times sensible	Not sensible	Don't know

It's complicated, Please explain…

Passwords—Complexity ○ ○ ○ ○

It's complicated, Please explain…

Passwords change frequency ○ ○ ○ ○

It's complicated, Please explain…

Access granting practices used by management ○ ○ ○ ○

It's complicated, Please explain…

Inactivity- timing out rules ○ ○ ○ ○

It's complicated, Please explain…

Systems with different access rules ○ ○ ○ ○

It's complicated, Please explain…

Who gets access & why ○ ○ ○ ○

It's complicated, Please explain…

12. Now, please briefly tell us of unwanted outcomes you may have heard about because of restricted access to legitimate users:

13. Do you think MOST workers believe that upper level managers understand how some computer security rules adversely affect productivity?

- ◯ Yes
- ◯ No
- ◯ Don't know
- ◯ They know but don't care

Other (please specify)

14. We've all been given rules about access security. Some may be easy to enact, others may be hard or seemingly impossible to enact (e.g., instructions incomprehensible, requires information we don't have). Of the recent access security rules with which you are familiar, please indicate the percent you estimate people..... (Should total to 100%):

a) Can't comply: rules that are extremely difficult or impossible to complete or follow

b) Too hard to comply: rules could be completed in theory but requires so much effort and/or reduces productivity that is not commensurate with security benefit that the rule were intended to provide

c) Can comply, and people routinely enacted these rules

15. If you wish, please give brief examples of the types of access rule compliance issues you were thinking about regarding this question (above).

16. When do you think most personnel would find circumvention of the access rules is justified? (Check as many as applies.)

- [ ] Critical task, e.g., saving a life, keeping the power grid up
- [ ] When the rules are so foolish that nothing else makes sense
- [ ] Access associated with role(s) make no sense, e.g., members of the same team can't see all of the information because only some have official access
- [ ] When allocation of access is foolish, e.g., people hired before November have access but others with similar functions and responsibilities don't
- [ ] When everyone else is circumventing a specific rule
- [ ] When people were officially taught to use a workaround

17. [Almost done, Thank you.] If people you know were able to change access rules to make work more efficient, but not endanger security, what recommendations might they suggest?

18. In general, thinking about computer use in your work, what is most frustrating about your job? And/or, what is the biggest computer-related problem users pose for you and your staff?

19. What useful computer-related practices or techniques would you teach a new colleague in the same role as yours to accomplish daily tasks?

20. Thank you very much. If you wish to add additional comments or suggestions, you may do so in the box below. Please remember not to indicate your name or the name of the organization where you may work.